Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #1

After review of the Part 70 License amendment application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A, Section 344 and Section 590, the Department finds the following facts:

I. Registration

A. Introduction

| FACILITY | MeadWestvaco Oxford Corporation |
|----------------------------------|---------------------------------|
| | (The Mill) |
| LICENSE NUMBER | A-214-70-B-A |
| LICENSE TYPE | Part 70 Minor Modification |
| NAICS CODES | 322121 |
| NATURE OF BUSINESS | Pulp & Paper Mill |
| FACILITY LOCATION | Rumford, Maine |
| DATE OF INITIAL LICENSE ISSUANCE | July 30, 2003 |
| DATE OF AMENDMENT ISSUANCE | August 27, 2003 |
| LICENSE EXPIRATION DATE | July 30, 2008 |

B. New Emission Equipment

The Mill has proposed adding the following new emission units:

| Equipment | Maximum Capacity (MMBtu/hr) | Maximum Firing Rate (scf/hr) | Fuel Type, <u>% sulfur</u> |
|-----------|-----------------------------------|------------------------------------|-------------------------------|
| NG Unit 1 | 6.54 | 6,350 | Natural Gas, negligible |
| NG Unit B | 14.11 | 13,700 | Natural Gas, negligible |
| NG Unit I | 7.69 | 7,466 | Natural Gas, negligible |
| NG Unit J | 12.83 | 12,456 | Natural Gas, negligible |

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C. Language Clarification

The Finding of Fact in the Mill's Air Emission License A-214-70-A-I outlines specific test methods to be used during compliance stack testing. This was done in error as several of the test methods listed are inappropriate for the specific equipment to be tested. The Department agrees with the Mill that the test method to be used during stack testing should be defined in the stack test protocol and the Mill is not bound to use the methods referenced in the Finding of Fact. Specific test methods are not referenced in the Conditions themselves and therefore no amendment is required to any permit condition.

D. Application Classification

The modification of a major source is considered a major modification based on whether or not expected emission increases exceed the "Significant Emission Increase Levels" as given in Maine's Air Regulations.

The emission increases are determined by subtracting the average actual emissions of the two calendar years preceding the modification from the maximum future license allowed emissions for any equipment affected by the change. In this case, the Mill is proposing the installation of new equipment and therefore there were no emissions from previous years and the permitted emissions from these units are compared directly to the Significance Level.

| Pollutant | New | Sig. Level |
|------------------|--------------|------------|
| | Equipment | |
| | <u>(TPY)</u> | |
| PM | 9.0 | 25 |
| PM_{10} | 9.0 | 15 |
| SO_2 | negligible | 40 |
| NO_x | 17.6 | 40 |
| CO | 14.7 | 100 |
| VOC | 1.0 | 40 |

This modification is determined to be a minor modification and has been processed as such.

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II. EMISSION UNIT DESCRIPTION

A. Building Air Heaters

The Mill proposes to install four (4) natural gas fired heaters to replace four (4) steam coil heaters in the North End Building. Unit 1 (6.54 MMBtu/hr) will be located in North End Finishing, Unit B (14.11 MMBtu/hr) in Roll Wrap, Unit I (7.69 MMBtu/hr) in the North Dry End and Unit J (12.83 MMBtu/hr) in the North Wet End. It is anticipated that these air heaters will be operated from October 1 to May 1 to provide building heat during the cold weather months.

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The Mill included in their amendment application dated July 23, 2003 a Best Available Control Technology (BACT) analysis. Due to the small size of the units and the fuel for which they were designed to fire, BACT was determined to be good combustion control, the use of natural gas fuel and the emission limitations listed in the Order section of this amendment.

Streamlining

Particulate Matter

The Mill accepts streamlining for particulate matter requirements. Chapter 103 of the Department's regulations and Best Available Control Technology (BACT) requirements are applicable. The BACT particulate matter limit is more stringent. Therefore, only the more stringent BACT particulate matter limit is included in this license.

Periodic Monitoring

Periodic monitoring shall consist of recordkeeping which includes records of amounts (scf) of fuel fired.

Based on best management practices and the type of fuel for which the air heaters were designed, it is unlikely that they will exceed the opacity or pollutant emission limits. Therefore, periodic monitoring by the source for these pollutants is not required. However, neither the EPA nor the State is precluded from requesting the Mill to perform testing and may take enforcement action for any violations discovered.

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B. Facility Emissions

Total Allowable Annual Emission for the Facility

(used to calculate the annual license fee)

| | PM | PM ₁₀ | SO_2 | NO _x | CO | VOC | Cl ₂ | ClO ₂ |
|-----------------|-------|------------------|---------|-----------------|---------|-------|-----------------|------------------|
| Power Boiler #3 | 65.7 | 65.7 | 341.6 | 525.6 | 262.8 | 19.7 | - | - |
| Power Boiler #5 | 65.7 | 65.7 | 341.6 | 525.6 | 262.8 | 19.7 | - | - |
| Power Boiler #6 | 82.8 | 82.8 | 772.6 | 1,655.6 | 1,090.0 | 22.1 | - | - |
| Power Boiler #7 | 82.8 | 82.8 | 772.6 | 1,655.6 | 1,090.0 | 22.1 | - | - |
| Lime Kiln | 105.1 | 105.1 | 100.7 | 227.8 | 170.8 | 8.8 | - | - |
| Recovery Boiler | 379.7 | 284.7 | 903.6 | 941.7 | 972.4 | 16.2 | - | - |
| Smelt Tank C | 70.1 | 69.2 | 24.1 | - | - | - | - | - |
| Dryers | 15.2 | 15.2 | 0.1 | 19.6 | 2.7 | 0.7 | - | - |
| Air Heaters | 9.0 | 9.0 | - | 17.6 | 14.7 | 1.0 | - | - |
| Cogen Emerg Gen | 0.1 | 0.1 | 0.1 | 1.6 | 0.4 | 0.1 | - | - |
| R15 Emerg Gen | 0.1 | 0.1 | 0.1 | 1.4 | 0.3 | 0.1 | - | - |
| Mill Emerg Gen | 0.2 | 0.2 | 0.1 | 4.4 | 1.2 | 0.1 | - | - |
| Fire Pump | 0.1 | 0.1 | 0.1 | 2.5 | 0.5 | 0.2 | - | - |
| Bleach Plant | - | - | - | - | - | - | 13.1 | 13.1 |
| Total TPY | 876.6 | 780.7 | 3,257.3 | 5,552.0 | 3,868.6 | 110.8 | 13.1 | 13.1 |

III. AIR QUALITY ANALYSIS

The Mill previously submitted an ambient air quality analysis demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards. An additional ambient air quality analysis is not required for this amendment.

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Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this sources:

- will receive Best Practical Treatment:
- will not violate applicable emissions standards
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-214-70-B-A subject to the conditions found in Air Emission License A-214-70-A-I and in addition to the Conditions listed below.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in Chapter 115 for making such changes and pursuant to the applicable requirements in Chapter 140.

For each standard and special condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only**.

The following shall replace Condition (46)(A) of Air Emission License A-214-70-A-I: [MEDEP Chapters 140, 117, and 122]

- A. The following are identified as Periodic Monitors:
 - 1. Fuel use records for Boilers #3, #5, #6, #7, the Lime Kiln, and Recovery Boiler C.
 - 2. Fuel analysis records for Boilers #3, #5, #6, #7, the Lime Kiln, and Recovery Boiler C.
 - 3. Fuel oil and natural gas firing rate for Power Boilers #3 and #5.
 - 4. Media solids for the scrubbers on Boilers #3 and #5.
 - 5. ESP voltage and amperage for Power Boilers #6 and #7.
 - 6. Media solids for the Lime Kiln Scrubber.
 - 7. NCGs firing duration for the Lime Kiln
 - 8. Virgin black liquor solids for Recovery Boiler C.
 - 9. Black liquor firing rate for Recovery Boiler C.
 - 10. Media solids for the Smelt Tank C Scrubbers.
 - 11. VOC content of coatings used.
 - 12. Sulfur content of diesel fuel fired in the Emergency Diesels.
 - 13. Hours of operation for each Emergency Diesel.
 - 14. Documentation that the Mill is maintaining a valid NPDES and/or SPDES permit.
 - 15. Solvent used in each Parts Washer.
 - 16. Steam Stripper monitoring requirements
 - 17. Fuel use records for the air heaters (Unit 1, Unit B, Unit I, & Unit J)

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The following are New Conditions:

- (59) Air Heaters
 - A. Air Heaters Unit 1, Unit B, Unit I, and Unit J shall fire only natural gas. Record of annual fuel use shall be kept. [MEDEP Chapter 140, BACT]
 - B. Emissions shall not exceed the following [MEDEP Chapter 140, BACT]:

| Equipment | | PM | PM ₁₀ | NO _x | СО | voc |
|-----------|----------|------|------------------|-----------------|------|------|
| Unit 1 | lb/MMBtu | 0.05 | - | - | - | - |
| | lb/hr | 0.33 | 0.33 | 0.63 | 0.53 | 0.03 |
| Unit B | lb/MMBtu | 0.05 | - | - | - | - |
| | lb/hr | 0.71 | 0.71 | 1.37 | 1.15 | 0.08 |
| Unit I | lb/MMBtu | 0.05 | - | - | - | - |
| | lb/hr | 0.38 | 0.38 | 0.75 | 0.63 | 0.04 |
| Unit J | lb/MMBtu | 0.05 | - | - | - | _ |
| | lb/hr | 0.64 | 0.64 | 1.25 | 1.05 | 0.07 |

- C. Visible emissions from Unit 1, Unit B, Unit I, and Unit J shall each not exceed 10% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block averages in a continuous 3-hour period. [MEDEP Chapter 140, BACT]
- (60) This amendment shall expire concurrently with Air Emission License A-214-70-A-I.

| DONE AND DATED IN AUGUSTA, MAINE THI | S DAY OF | 2003. |
|--|--------------------|---------------|
| DEPARTMENT OF ENVIRONMENTAL PROTEC | CTION | |
| | | |
| BY: | | |
| DAWN R. GALLAGHER, COMMISSION | ER | |
| PLEASE NOTE ATTACHED SHEET FOI | R GUIDANCE ON APPE | AL PROCEDURES |
| Date of initial receipt of application: | 7/28/03 | |
| Date of application acceptance: | 7/31/03 | |
| Date filed with the Board of Environmental | Protection: | |

This Order prepared by Lynn Ross, Bureau of Air Quality.